

AMENDMENTS TO THE CLAIMS

1. (Previously Presented) An image data correcting device for correcting a reverse-side projection image that is generated when reading a document from one side of the document, the document having images on both sides thereof, the image data correcting device comprising:

detecting means for detecting a flat detection part configured to detect an intensity difference between first image data corresponding to a part of a predetermined small area and second image data corresponding to the remaining parts of the predetermined small area, and compare the intensity difference with a first predetermined value;

determining means for determining whether the first image data corresponds to a halftone image; and

an average computing part configured to compare a subtraction value with a second predetermined value, the subtraction value being obtained by subtracting an average value of the first image data and the second image data from the intensity of the first image data;

an intensity detection part configured to compare the intensity of the first image data with a third predetermined value; and

an intensity changing part configured to change means for changing an intensity of the first image data to a predetermined low intensity, when the intensity difference is equal to or smaller less than a first predetermined value and the first image data does not correspond to the halftone image the subtraction value is equal to or less than the second predetermined value and the

intensity of the first image data is equal to or ~~smaller less~~ than a ~~second the third~~ predetermined value, thereby correcting the reverse-side projection image.

~~wherein the determining means retains the first image data without change when the first image data corresponds to the halftone image, and~~

~~wherein said predetermined low intensity corresponds to a background level.~~

2. (Currently Amended) The image data correcting device as claimed in claim 1, wherein the second predetermined value is determined so that an intensity of at least a part of an image other than the halftone image is equal to or greater than the second predetermined value and an intensity of the halftone image is ~~smaller less~~ than the second predetermined value.

3. (Previously Presented) The image data correcting device as claimed in claim 1, wherein the first predetermined value is determined so that a first intensity difference of the first image data is equal to or greater than the first predetermined value when the first image data corresponds to the halftone image, wherein the first intensity difference is a difference between the intensity of the first image data and an average in intensities of the first image data and the second image data.

4. (Original) The image data correcting device as claimed in claim 1, wherein the predetermined small area is defined by a pixel matrix, and the first image data corresponds to one of pixels located in the center of the pixel matrix.

5. (Original) The image data correcting device as claimed in claim 4, wherein the pixel matrix is a 3x3 matrix.

6. (Currently Amended) The image data correcting device as claimed in claim 1, wherein the predetermined low intensity is equal to or ~~smaller less~~ than an intensity of a background of an image from which the predetermined small area is extracted.

7. (Original) The image data correcting device as claimed in claim 1, further comprising smoothing means for smoothing the first image data after the intensity of the first image data is changed.

8. (Original) The image data correcting device as claimed in claim 7, further comprising selecting means for selecting whether to output the first image data before smoothing or after smoothing.

9. (Previously Presented) The image data correcting device as claimed in claim 8, wherein the selecting means selects the first image data after smoothing when

the first image data corresponds to an image other than the halftone image, and selects the first image data before smoothing when the first image data corresponds to the halftone image.

10. (Currently Amended) An image reading device a document having images on both sides thereof, the image data reading device comprising:

a scanning part configured to scan means for scanning an original document to obtain image data and converting the image data into digital form; and

an image data correcting device configured to correct a reverse-side projection image that is generated when reading the document from one side of the document correcting the image data supplied by the scanning means,

wherein the image data correcting device comprises:

detecting means for detecting a flat detection part configured to detect an intensity difference between first image data corresponding to a part of a predetermined small area and second image data corresponding to the remaining parts of the predetermined small area, and compare the intensity difference with a first predetermined value;

determining means for determining whether the first image data corresponds to a halftone image; and

an average computing part configured to compare a subtraction value with a second predetermined value, the subtraction value being

obtained by subtracting an average value of the first image data and the second image data from the intensity of the first image data;

an intensity detection part configured to compare the intensity of the first image data with a third predetermined value; and

an intensity changing part configured to change means for changing an intensity of the first image data to a predetermined low intensity, when the intensity difference is equal to or ~~smaller less~~ than a first predetermined value and ~~the first image data does not correspond to the halftone image~~ ~~the subtraction value is equal to or less than the second predetermined value~~ and the intensity of the first image data is equal to or ~~smaller less~~ than a second ~~the third~~ predetermined value, thereby correcting the reverse-side projection image.

~~wherein the determining means retains the first image data without change when the first image data corresponds to the halftone image, and~~

~~wherein said predetermined low intensity corresponds to a background level.~~

11. (Previously Presented) An image forming apparatus comprising:

an image reading device generating image data by scanning an original document, the document having images on both sides thereof, said image reading device including an image data correcting device configured to correct a reverse-side projection image that is generated when reading the document from

one side of the document ~~correcting~~ the image data supplied by the image reading device; and

an image forming device forming a visible image based on the corrected image data supplied by the image data correcting device,

wherein the image data correcting device comprises:

~~detecting means for detecting a flat detection part configured to detect~~ an intensity difference between first image data corresponding to a part of a predetermined small area and second image data corresponding to the remaining parts of the predetermined small area, and compare the intensity difference with a first predetermined value;

~~determining means for determining whether the first image data corresponds to a halftone image~~; and

an average computing part configured to compare a subtraction value with a second predetermined value, the subtraction value being obtained by subtracting an average value of the first image data and the second image data from the intensity of the first image data;

an intensity detection part configured to compare the intensity of the first image data with a third predetermined value; and

an intensity changing part configured to change means for changing an intensity of the first image data to a predetermined low intensity, when the intensity difference is equal to or ~~smaller less~~ than a first predetermined value and ~~the first image data does not correspond to the halftone image~~ the subtraction value is equal to or less than the second

predetermined value and the intensity of the first image data is equal to or smaller less than a second the third predetermined value, thereby correcting the reverse-side projection image.

~~wherein the determining means retains the first image data without change when the first image data corresponds to the halftone image, and~~

~~wherein said predetermined low intensity corresponds to a background level.~~